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ABSTRACT

The general purpose of the research at Sumner High School was to apply reinforcement contingencies to the academic behaviors of underachieving students who have college potential, and to evaluate the results of the reinforcement contingencies. The specific aim was to improve academic achievement in these youth and to motivate them to qualify for and to enroll in college. This was accomplished through identifying talented poverty area students, defining and measuring their appropriate and inappropriate academic behaviors and their school achievement, applying contingent reinforcement and evaluating the results through careful measurement and analysis of the techniques which produced desirable academic behavior. The results of the research indicated that the most significant gains in achievement are noted when classes were structured, when more clearly defined cues were given, and when the number of responses required of students were increased. (Author)

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Final Report

Project No. 1G090

Grant No. OEG-7-72-0006 (509)

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AN ACADEMIC INCENTIVE PROGRAM FOR HIGH SCHOOL YOUTH FROM A POVERTY AREA

June 30, 1973

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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AN ACADEMIC INCENTIVE PROGRAM FOR HIGH SCHOOL YOUTH FROM A POVERTY AREA

Abstract

The general purpose of the research at Sumner High School was to apply reinforcement contingencies to the academic behaviors of underachieving students who have college potential, and to evalute the results of the reinforcement contingencies. The specific aim was to improve academic achievement in these youth and to motivate them to qualify for and to enroll in college. This was accomplished through identifying talented poverty area students, defining and measuring their appropriate and inappropriate academic behaviors and their school achievement, applying contingent reinforcement and evaluating the results through careful measurement and analysis of the techniques which produced desirable academic behavior.

Applied behavioral analysis research strategies were utilized to research both social and academic behaviors of the secondary students at Sumner High school. The results of the research indicated that the most significant gains in achievement were noted when classes were structured, when more clearly defined cues were given, and when the number of responses required of students were increased. In the latter, students did come into contact with the reinforcers of "praise" for a daily job well done.

In conclusion, this investigator feels that the procedures implemented in this secondary setting are most promising. In addition to identifying and working with a number of talented students, a program was implemented at Sumner High school in which a number of teachers, parents and other staff members were trained in applied behavioral strategies so that subsequent

training and research could be carried out after this funding is terminated.

An abstract of some significant secondary research carried out follows:

(1) The Effect of Daily Classroom Assignments on Talkouts in a Highschool Classroom. Continuous recording was used to measure talkouts in the classroom. The class sessions was divided into four sections with each section approximately 15 minutes in length. Baseline data indicated a greater number of talkouts occured during the first section of the period. Experimental procedures consisted of giving daily assignments at the onset of the class. This procedure proved effective in decreasing the average talkouts during the class and was instrumental in increasing responses and test scores for some students.

(2) The Effects of a Reinforcer on Tardy Behavior of Senior Highschool Students. The purpose of this research was to determine the effect of a reinforcer on the tardy behavior of three senior highschool students. The number of "tardies" for the first 45 days of school were recorded for each of the three students. The students were informed that if every effort were made by them to be on time each day, they could accumulate satisfactory excuses for days tardy over the next 45 days. This procedure did not have a significant effect on the tardy behavior of the students researched.

(3) Ten sophomore students were selected who were described as talented underachievers. These students were counseled throughout the semester on study habits, attendance at class, and increased achievement. There was no real indication of grade improvement

so bi-weekly parent contacts and incentives were added to the strategy the next semester.

(4) In another research program, an algebra and a history class were worked with in an effort to increase test scores. The teachers were taught how to structure their lecture presentation and course program so that students could receive feedback and make responses. The results of this strategy did show improved test scores for students when the experimental procedure was applied.

(5) The reduction of the number of disruptive talk-outs by a senior highschool student was another area of interest for a secondary teacher. By recording the number of times the subject emitted loud talking, the teacher was able to work out a reinforcing procedure to decrease talk-outs. During baseline, the subject usually talked out 4 or 5 times during a class period. When experimental procedures were applied, (free class time to spend in the library for keeping the number of talk-outs below a certain level) the number of talk-outs decreased to a mean of one talk-out per class period.

(6) The reduction of the number of laugh-outs in a homemaking class in an inner city junior highschool was still another area researched. $Baseline_1$ records showed the mean number of laugh-outs of the subject to be 7.5. When experimental procedures were applied (class dinner), no appreciable change in behavior was noted. Laugh-outs were below $baseline_1$ levels but they still were higher than the teacher could tolerate. When experimental procedures 2 and 3 were applied (free dessert for lunch), the number of laugh-outs reduced to a mean of 2. This treatment

procedure proved effective in reducing the number of laugh-outs of the subject researched.

(7) The purpose of this research was to reduce the number of talk-outs of a female subject during typing II class. The subject's behavior was not only annoying to the teacher but also the subjects grade for two nine-week grading periods was much lower than her over all grade mean of 2.5. During baseline$_1$ procedure, the mean number of talk-outs was 6 per class period. During experimental procedure$_1$ when the subject was reinforced with first choice at new library books and an opportunity to be the librarian's guest at the opera Tosca, the subject's talk-outs reduced to a mean of one per class period. When the reinforcement procedure was withdrawn, the mean number of talk-outs increased to 4. When reinforcement procedures were reinstated, the mean number of talk-outs were at 0.

As a result of the procedures carried out in this class, the subject's behavior in Typing II class was remarkably changed. The teacher and the subject's classmates were relieved of annoying disruptions. By concentrating on her daily assignments, the subjects grade in Typing II improved noticeably.

(8) The students in a French class had been completing their homework in other classes and in their seats after the bell for class had sounded. A token reinforcement system was initiated to improve the number of completed assisgnments turned in before the tardy bell for class and the number of correct on assignments turned in. The students were given one month to earn 45 tokens with which they earned a lunch in a French Restaurant. An added reinforcer was two hours away from school since the usual lunch schedule

allows students only 25 minutes for lunch. The token system proved very effective in increasing completed assignments and the number of correct responses on assignments turned in.

(9) This research investigated the effectiveness of modified teaching procedures on tests and/or quiz scores for high achievers in two Humanities classes. The class suggested reinforcers were compiled from suggestions made by the students concerning activities that interested them most. The results of this research indicated that the modified teaching procedures and the reinforcers made available to class participants were effective in increasing the mean class scores on tests and/or quizzes.

(10) The purpose of this study was to investigate the effectiveness of counseling procedures using a token system in a behavior modification plan utilizing teacher and parent conferences to increase attending behavior and grades of a tenth grade student. Both the parent and the teacher began reinforcement procedures which involved giving tokens to the subject each time he emitted the appropriate behavior for the home and the school setting. The results indicated that reinforcement procedures inplemented in the home as well as in the school are compatible measures for modifying attending behavior and low scores on assignments.

TITLE PAGE

Final Report

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Name of Project Directors: Dr. R. Vance Hall and Dr. Jasper W. Harris

Title of Proposal: AN ACADEMIC INCENTIVE PROGRAM FOR HIGH SCHOOL YOUTH FROM A PROVERTY AREA.

Introduction

The purpose of the Sumner Highschool Academic Research Program was to investigate the effects of applying reinforcement contingencies to the academic behaviors of underachieving poverty area students who have college potential, and to evaluate the results of the reinforcement contingencies. The specific aim was to improve academic achievement in these youths and to motivate them to qualify for and to enroll in college. This was accomplished through identifying talented poverty area students, defining and measuring their appropriate and inappropriate academic and social behaviors, applying contingent reinforcement and evaluating the results through careful measurement and analysis of the techniques which produced desirable academic and social behaviors.

Unlike the retarded or otherwise seriously handicapped poverty area youths, academically talented students and the average student could get good grades and could qualify successfully for college if motivated to apply sufficient additional effort to assignments. They do not necessairly need remedial instruction.

It appears, however, that the past environment of these talented underachievers has failed to provide the models and the reinforcement contingencies necessary for them to develop appropriate student behaviors. The result is often a pattern of poor academic performance including failure to complete homework; poor class participation, truancy, and disruptive or withdrawn behavior in class. This behavioral pattern often results in poor grades and disciplinary action by teachers, parents, and school officials and makes it increasingly difficult for students to ever emit the expected appropriate behaviors. The behavioral procedures applied delt with some of these problems and further developed strategies for remediating same.

Problems

As was stated in our progress report of June 30, 1972, our original plan was for the research to begin in September, 1971, at the beginning of the school year. Since our grant was funded originally for only two semesters, its termination in December, 1972 would have diminished the likelihood of us showing the full impact of our research efforts and from demonstrating the full academic gains and achievement we feel our technology can show with students over a full academic year. Fortunately, we were granted a semester extension of the grant which enabled us to research more social and academic problems on the secondary level; train seven teachers at Sumner Highschool in applied behavioral research procedures through a three hour graduate course through the University of Kansas offered in Sumner Highschool, as well as develop and prescribe secondary curriculum materials for assessing deficits and subsequent remediation for underachieving but talented students.

Significant Findings and Events

Early research carried out at the elementary level had indicated that many underachieving students engaged in disruptive and dawdling behaviors which interfere with classroom performance (e.g. Hall, Lund, & Jackson, 1968; Hall, Panyan, Rabon, & Broden, 1968). In these studies it was found that if the pupils were reinforced for engaging in appropriate behaviors, disruptive behaviors decreased and academic performance increased. However, in our pilot research (Harris & Hall, 1972) it was noted that the underachievers selected were not disruptive students. Furthermore, when the rates of engaging in participation in discussions and time spent reading and writing, no high correlations between the behaviors observed and the report

card grades could be established. In the same article by (Harris and Hall (1972) the development of a system of recording teacher ratings of behavior on a daily basis was researched along with experiments exploring the effects of incentives on classroom performance and the effects of modifying teaching procedures.

The results of the research indicated that the most significant gains in achievement were noted when classes were structured, when more clearly defined cues were given, and when the number of responses required of students were increased. In the latter, students did come into contact with the reinforcers of "praise" for a daily job well done.

Since our pilot research seemed to be such a promising approach, we conducted research studies during the second semester at Sumner Highschool. A description and analysis of same follows.

TITLE: The Effect of Daily Classroom Assignments on Talkouts in a High School Classroom

ABSTRACT

Continuous recording was used to measure talkouts in the classroom. The class session was divided into four sections with each section approximately 15 minutes in length. Baseline indicated a greater number of talkouts occured during the first section of the period. Experimental procedure one consisted of giving daily assignments at the onset of the class. This procedure proved effective in decreasing the average talkouts from 19 in section one during baseline to 8.4 talkouts in section one during the experimental procedure of daily assignments.

INTRODUCTION

The fifth hour class was chosen because of the high noise level and lack of classroom control (Hall, Panyan, Rabon, Broden, 1968). The study was started with the intention of measuring the teacher response to inappropriate classroom behavior. After measuring the teacher responses the experimental procedure was to consist of praise for appropriate behavior and ignoring inappropriate behavior (Broden, Bruce, Mitchell, Carter, and Hall, 1970). After taking baseline it was discovered that the teacher did not respond to the inappropriate behavior enough to consider the experimental procedure. At this time the experimenter realized the necessity of measuring inappropriate student behavior (Mawhinney, Bostow, Laws, Blumenfeld, Hopkins, 1971). Talkouts were measured as the most frequent occurring inappropriate behavior. To decrease the talkouts daily work was given at the onset of each class period. Daily work was chosen because it required the student to start work immediately. The assignments were

collected during the class period and could not be taken home.

SUBJECT AND SETTING

This study was conducted in a Biology I class at a black inner city high school in Kansas City, Kansas. The enrollment in the class was 31 students of which 17 were male and 14 were female. The class was composed of 20 sophomeres (10 male, 10 female) and 11 juniors (7 male and 4 female). There was one male junior lab assistant who collected data for the study. The class met during the fifth hour directly following lunch (approximately 12:20 to 1:15 p.m.).

MEASUREMENT PROCEDURES

The fifth hour class was chosen for the study because of the high noise level in the classroom. The teacher felt too much time was spent in getting the class in a situation conducive to study (no talking and no walking around). Various types of behavior were chosen to be observed for baseline (Talking, out of seat, and non-study). Talking was given two definitions. When the class was doing individual or group work and the teacher instructions had already been given, a talk-out was a loud outcry noticeable to the recorder. When the teacher was giving information about the subject or instructions in the lab work, a talkout was considered any talking not directed to the teacher. Out-of-seat behavior was when a student was completely out of his seat without permission and was not approaching the teacher. Non-study behavior was considered when the student had no book or pencil and was not doing the classroom work assigned. Continuous recording was used. Tally marks were placed by the student's name when out of seat, talkouts or non-study behavior was observed. The class period was divided into four sections

with each section being approximately 15 minutes long. A place was designated to record the activities done in the classroom for that day and any change in the length of the class because of assemblies for the student body. All data were kept by the junior lab assistant. Reliability checks were made by a junior in the class. She was chosen because of her outstanding achievements academically and because she never had displayed the behavior being measured. Reliability averaged 96.0% for the entire experiment in section one of the class period.

EXPERIMENTAL PROCEDURES AND RESULTS

$Baseline_1$

$Baseline_1$ was measured for three sessions only. The classroom work consisted of lab work or lab discussions throughout the entire experiment. Baseline was so short because teacher response to classroom behavior had been measured previously to this and a change was made to measure inappropriate student behavior for the experiment. At this time a consistently high number of talkouts occurred in section one. The mean for the number of talkouts was 19 for section one, 13 for section two, 5 for section three and 15 for section four.

$Experimental\ Procedure_1$

The experimental procedure was designed to decrease the number of talkouts occurring in section one of the class. Daily work assignments were handed out at the onset of class. This gave the students some class work to do from the beginning of class and allowed the teacher to take roll. The work usually required 15 minutes to half and hour to complete. The questions pertained to the information needed to do a lab and the procedure for the lab or to the results obtained from the lab done the day

before. The classroom behavior was better when the assignments were on a sheet of paper for each student and not on the board or the overhead projector. A sharp decline was seen in the talkouts for section one and two. Talkouts in section three increased slightly. Collection of the papers could have caused this slight increase. Talkouts in section four decreased slightly. Section one: mean 8.4; section two: mean 7.1; section three, mean 5.4 and section four: mean 5.3.

Baseline$_2$

After seven sessions in section one baseline two began. The classroom assignments were no longer given at the first of the period. Some assignments were given later on in the period. The teacher usually tried to give some type of instructions as to the lab information needed for the day. An increase of the talkouts was observed. Section one: mean 15; section two: mean 10.2; section three: mean 8.5; and section four: mean 8.9.

Experimental Procedure$_2$

After nine sessions of baseline$_2$ the same experimental procedure was reinstated. Four class sessions were recorded before the data keeping had to be terminated because of the close of class. Again a decrease in the number of talkouts was observed. Section three has had a steady increase in talkouts throughout the experiment.

DISCUSSION

After completing the study there are several things that could be altered and/or dealt with in more detail. If there is a special group of students usually illiciting the inappropriate behavior, the continuous recording sheet can also be used. If a group can be singled out, a study can be done with these students. If there is no intention to establish

which students are emitting the disruptive behavior, a Playcheck type of recording could be used with more ease and probably with as much accuracy.

The experimental procedure of giving daily work collected during the class period demonstrated to the teacher a method of classroom management that helps classroom control. With this particular class, control was easier with the structured daily work. The planning required to prepare the daily work and the decrease in talking gave the teacher more confidence in handling the classroom. During $baseline_2$ even with the increase in talkouts the disruptive behavior was not as disturbing to the teacher. During the $experimental\ procedure_1$ the teacher checked the students for text books and found this procedure increased the study behavior of the students. In the class the students need their books daily and have been asked to bring them before, but checking for the books increased the number of books in the classroom.

This study has proved helpful to the teacher by increasing the things accomplished in the classroom and by increasing her confidence in handling the class.

TITLE: The Effects of Reinforcement on Tardy Behavior on Senior High School Students.

ABSTRACT

The purpose of this research was to determine if a reinforcer (excused absences) would have any effect on reducing tardy behavior. Three students, two boys and one girl were selected because of the frequency in which they appeared for tardy excuses to school. Forty-five school days since the opening of school were compared with forty school days after reinforcement was introduced. The results show no significant change in tardy behavior.

INTRODUCTION

This study was intended to determine the effectiveness a reinforcer would have upon reducing excessive tardies for three senior high school students. One of the concerns of the writer was to research the possibility of rewarding these students for daily and weekly promptness by presenting them with satisfactory excuses for having accumulated days for being on time.

SUBJECTS AND SETTING

The study took place at Sumner High School in Kansas City, Kansas. The school is composed of three grades, 10 through 12. The Vice-Principal was in charge of attendance, discipline and athletics. The Vice-Principal was also in charge of writing all excuses for students who were tardy to school each day. The attempt as aforementioned was to reinforce on-time behavior. By accumulating this time a student could receive a reinforcer in the form of satisfactory excuses during the experimental procedure.

MEASUREMENT PROCEDURE

Three students were selected for this study because of noticable tardies to school. Excessive tardiness for this study is defined as being late for school on two or more days per week.

Reliability for observation procedures was the writing of tardy excuses in duplicate. One was given the student and one was kept and placed in the guidance folder or permanent record folder of each student.

Another reliability observation was obtained by checking with guidance teachers to see if students were in class on time the days he did not report to the office.

Tardies at Sumner included any student not inside his classroom door by the end of the ringing of the 7:30 a.m. bell.

EXPERIMENTAL PROCEDURE AND RESULTS

Baseline

The number of tardies for the first 45 days of school were recorded for each of the three students. Each of the three students were told of the number of tardies being accumulated in their permanent records. The students were informed that if every effort were made to be on time each day, they could accumulate satisfactory excuses for days tardy over the next 45 days. The students were also told that two satisfactory excuses could be accumulated for every consecutive five days for being on time. It was hoped that the two satisfactory excuses would prove reinforcing, however, no significant change in tardy behavior was noted.

TALENTED UNDERACHIEVERS

Procedures and Results

In other research carried out at Sumner, 10 sophomore students were selected who were described as talented underachievers. These students were selected as subjects based on information from their permanent school records, their teachers, counselor, and school administrator. The permanent record cards were used in the initial screening process to identify those high scores on school-administered IQ and/or achievement test batteries but with relatively low grades on other ratings of school performance. These 10 students were counseled throughout the semester on study habits, attendance at class, and increased achievements on tests. These students were followed the next semester and home visits were made by the researcher in an effort to get parents involved in the academic improvement process.

In another research program, two teachers, an algebra teacher and a history teacher helped in the academic research efforts of students by modifying their academic program so that students had an opportunity to make responses and receive feedback. These same teachers applied these strategies to their entire class also.

The researcher initially visited with the teachers about the purposes of the research. After receiving indication from them that they would be interested in pursuing a program of this nature, the researcher proceeded to work individually with them to help design their course to meet research guidelines. The teachers were asked to structure their lecture presentations so that what had formally been a two-week presentation now became a week and a half presentation. The same material took longer to present because the teacher was asked to first determine what a student was to learn that day, program her instruction so that students could meet those goals, and then require students to respond to five short study questions which comprised the homework assignment. These questions were discussed the next day before class and students were able to get feedback on the correctness of their responses. The study questions were not graded and no grades were recorded but students had to turn in their papers. This procedure was undertaken to determine whether take-home study questions would help increase scores on tests.

The results of this procedure in the algebra class showed that during $baseline_1$ the mean class grades on tests was 3.8 on a grading scale where 1=A and 5=F (6+incomplete, 7=withdrew). During $experimental\ procedure_1$ the mean class grade was 3.1; during $baseline_2$ the mean class grade was 3.99; and during $experimental\ procedure_2$ the mean class grade was 3.3.

In the history class during $baseline_1$ the mean class grade was 3.3;

during experimental procedure$_1$ the mean class grade was 2.8; during baseline$_2$ the mean class grade was 3.7; and during experimental procedure$_2$ the mean class grade was 2.6.

Conclusion

The results did indicate dramatic improvement in the algebra class mean grades. However, the data showed that the class mean rose from a 4.0= D to 3.1 = C which, in a disadvantaged setting is significant. In the history class mean class grade improvement was much more significant during experimental procedure$_2$ than during experimental procedure$_1$. A class mean approaching 2.5 = B from a baseline mean of 3.3 to 3.6 is a creditable improvement. Therefore, it can be concluded that this approach can be useful in increasing student test scores. Perhaps, when the procedure is coupled with other strategies we will see even higher gains.

TITLE: The Modification of Disruptive Talk-Outs

ABSTRACT

By making the subject fully aware of the number of times he disrupted the class with his loud talking, the teacher was able to work out a system of reinforcement with him to attempt to decrease his talk-outs. The reinforcer was free class time to spend in the library which the student earned by keeping the number of talk-outs below a certain level.

After baseline was established, the changing criterion design was used in an effort to shape the student's behavior. At the end of the study it was noted that this method of behavior modification proved to be extremely effective.

INTRODUCTION

Several studies done in elementary schools (Hall, Panyan, Rabon, Broden, 1968; Hall, Fox, Goldsmith, Willard, Emmerson, Owen, Davis, Porchia, 1971) and a junior high school (Hall, 1971) have shown how effective the teacher's attention and his use of various kinds of reinforcers can modify classroom behavior to make classroom control much easier for the teacher and increase students' studying rate.

Most of the studies relating to talk-outs in the classroom were done in elementary schools where this kind of behavior is most prevalent or is expected to be most persistent. To combat talk-outs, many experimenters used the token reinforcement system or praise.

Since this study was done at the senior high school level of a public school, it was decided that neither tokens, which are often cumbersome and time consuming, nor praise, which has little effect on many high school

students, would be useful alone. After observing the subject of this experiment, the teacher decided to combine praise with a student desired activity to determine if this system would work better than the others. This experiment was also an attempt to learn whether or not reinforcement would be more effective than punishment in deterring talk-outs.

SUBJECT AND SETTING

The subject of this experiment was James Porter, a tenth grade student enrolled in English II at Sumner High School, which is located in a low socio-economic area of northeast Kansas City, Kansas. James was an average student who usually did his class assignments but often had to be coaxed.

The problem encountered with James was his frequent talk-outs for which he was verbally reprimanded by the teacher. His talk-outs were a distraction to the teacher and the other pupils.

EXPERIMENTAL PROCEDURES AND RESULTS

To establish baseline, during a period of eleven days the teacher counted the number of times he had to speak to James about talking aloud within a class period. The reliability check was done by having a student count James's talk-outs at the same time as the teacher. The percentage of agreement was one hundred per cent. When graphed, baseline was determined to be stable. The baseline mean was three and eight tenths and the median was four. The highest number of times James had to be spoken to during baseline was five, and lowest number of times was zero.

After $baseline_1$, James was asked to keep his talk-outs at three or less. Each day that talk-outs did not exceed three, he was given ten minutes to be used in the library for leisure reading or listening. Time was

accumulative up to one hour. If talk-outs were more than three, five minutes were deducted. This information was recorded daily on a chart and later transferred to a graph using the changing criterion design.

At the end of seven observation sessions with three as the maximum number of talk-outs, the maximum was lowered to two, then one, and finally zero. The same amount of library time was offered when the maximum was two, one and zero as had been offered for three.

The per cent of agreement during the experimental stages was one hundred per cent. The median was one and the mean was one and three tenths.

DISCUSSION

This study proved the value of using reinforcement and its effectiveness in improving and maintaining certain classroom behaviors. In utilizing the changing criterion design, the teacher discovered that it was effective only to a certain point. That is, with this subject, keeping his talk-outs at zero was a noticeable strain. At times he even lost time because of the pressure. In fact, it was only during this stage that he lost time. Since data-taking has ceased, it has been noted that the subject has rarely been reprimanded for talk-outs. Many times he has been at zero. talk-outs.

Studies of this nature, which use reversal or changing criterion design, can be advantageous to any classroom teacher. In most instances, the time and effort spent in keeping records and observing the subject(s) are well worth while to the teacher and the pupils.

TITLE: The Effect of Modifying a Specific Behavior of One Student

ABSTRACT

The behavior of concern in this study was the disruptive "Laugh-outs" of a subject in a regular homemaking class in an inner city junior high school. When dessert at lunch time at school was used as a reinforcer, the occurrences of laugh-outs reduced from Baseline$_1$ range of 0 - 12, with a mean of 7.5 to an Experimental $_3$ range of 2 - 6 with a mean of 3.7. Thus, dessert was effective in reducing the number of laugh-outs of a junior high subject.

INTRODUCTION

The experimenter became interested in this subject because she was the "key" to most of the class disruptions. Talking out was of particular concern because it was emitted at an unusually high rate and increased the level of noise in class and caused confusion in the classroom. In many instances class behavior was contingent on the behavior emitted by the subject. The experimenter's objective was to decrease the "laugh-outs" in the class. Demonstrations in each phase of this experiment has shown continous decreases in "laugh-outs".

SUBJECT AND SETTING

The information for this study was compiled in a seventh grade Homemaking class in a Junior High School. The school is in the inner-city with an enrollment of approximately 1,150 boys and girls in grades seven and eight. The student population is comprised of 100% blacks. The staff consist of 35% whites and 65% blacks. The majority of the students

can be termed economically and culturally disadvantaged.

The subject is considered average in her academic subjects. Her self control grades were fairly low in all of her classes. She loves to chew gum and sit on the table tops. Laugh-outs were defined as the same audible sounds that a person would emit if he were told a funny joke. After being spoken to about her behavior she would again resume work or stop the laughter. In a class period of forty - five minutes the subject emitted as many as fifteen outbursts.

MEAUSREMENT PROCEDURES

The observations for the study took place in the classroom with the experimenter as the observer. On days that reliability was taken, the observations were taken with a co-worker. The behavior was explained as loud outburst of laughter that she emitted without student prompting or group conversation.

$Baseline_1$ indicated a range from 0-12, mean 7.5, and median 9.0. Reliability checks during $baseline_1$ was 90%. $Experimental\ procedure_1$ showed a range of 1-15, mean of 4.9, median of 4. $Experimental\ procedure_2$ showed a range of 2-7, mean of 3.8, median of 3.0. $Baseline_2$ indicated a range of 0.4, mean of 2.0, median of 2.0. $Experimental\ procedure_3$ showed a range of 2-6, mean of 3.7, median of 3.0.

EXPERIMENTAL PROCEDURE AND RESULTS

During this Reversal Design, the subject was observed for ten days during $baseline_1$. "Laugh-Outs" were graphed with a range of 0-12, mean 7.5 and median 9.0. Reliability was at 90%. During $baseling_1$ there

were no verbalizations or reprimands from the teacher. After baseline$_1$, the experimenter resumed experimental procedure$_1$; the range was 1-15, mean 4.9, median 4.0. A reliability check during this phase was 100%. During procedure$_1$ the experimenter informed the class that if there was an improvement in the excessive noise from the class, that they would be allowed to go to dinner. The teacher began this phase with a changing criterion design. No student was to exceed 8 then 6 laugh-outs except the subject. At the end of this period of time results still did not prove favorable.

The experimenter instituted procedure$_2$ before going to baseline$_2$. The reinforcement in procedure$_1$ proved to be ineffective. Experimental procedure$_2$ looked more favorable. The teacher told the subject that she was not acting like a seventh grader should; that she was much too large for such immature actions. The teacher then promised her dessert with her lunch if her "laugh-outs" did not exceed three during a class period. The subject promised to try. The range during procedure$_2$ was 2-7, with a mean of 3.8, and a median of 3.0. Reliability was at 100%.

Baseline$_2$ showed a range of 0-4, mean of 2.0, median of 2.0. Reliability was at 100%. Experimental procedure$_3$ was within the same range as experimental procedure$_2$. Post checks have shown the greatest improvement. The subject has worked quite hard to maintain her improvement.

DISCUSSION

The experimenter was quite doubtful that any reinforcement procedure would modify the subjects behavior. Before the teacher began this study, the subject was in a totally different situation. The class was scheduled in the clothing laboratory. The relationship between the teacher and

subject was one where the teacher would give a few words and would receive words from the subject in the same tone; which then meant a reprimand from the teacher. The study took place in the foods laboratory. As the study began, the teacher revised her curriculum for this particular class. In total, it meant that each student would be allowed to prepare and demonstrate any recipe she found to her liking. The subject proved to be a model student on the days that a demonstration was scheduled. During experimental procedure$_1$, when the teacher promised to take the class out to dinner, she deliberately decided that she did not want to go out to dinner. There were one or two others that made the same comment at the time. In experimental procedure 2 and 3, when the subject was offered dessert earned with her lunch, she merited four desserts but only accepted two and refused the last two desserts. She told me I could get my money back.

The researcher felt that this procedure has been effective. It has be been rewarding for the teacher, the other classmates and the subject.

TITLE: The Teacher and Librarian as Behavior Modifiers

ABSTRACT

This study involved an eleventh grade high school girl living in an all-black depressed socio-economic area of Kansas City, Kansas. An attempt to eliminate her talking-out behavior in a typing II class was made by this researcher. This behavior was extremely annoying to the teacher and to the subject's classmates, and was a contributing factor to the failing grades the subject was receiving. Experimental procedures to eliminate this behavior were carried out as a cooperative project between the typing teacher and the school librarian. Because of the girl's strong literary and musical interests, first choice at checking out and reading new books received in the school library, and a free ticket to attend an opera, were offered as rewards contingent upon the subject's lowering her talking-out behavior These reinforcers were effective in decreasing her talking-out behavior.

INTRODUCTION

The librarian became interested in the subject as a possible candidate for behavior modification when she learned that the subject, one of the more discriminative readers of the school library collection, was a serious discipline problem in her Typing II class. The subject's behavior was extremely annoying to the teacher, and so distracting to her own performance that her grade for the first nine-week period was 4 or D and for the second nine-week period, a 5 or F.

A conference with the subject's high school counselor revealed the following:

The subject was a normal girl, of average to above average intelligence. Her academic record of achievement suggested strongly that the 95IQ revealed by the Lennon Test, form J (April, 1969) was not valid. In the National Development Test given in her sophomore year (1971-1972), her composite score placed her in the 53rd percentile. The PSAT/NMSQT given the fall semester of the 1972-1973 school year gave her a selection index of 102, on a possible range of 60 to 240.

The subject's cumulative record showed a mean grade during her elementary schooling of 2.5, with the same record of achievement being maintained for the three years she had spent in junior high school. Her grades during her sophomore year averaged 2+.

In this, her junior year, her record revealed one grade of 3 during the first two nine-week grading periods; the other grades were 2s, with the exception of the 4 and 5 received in Typing II, even though she was enrolled in six classes per school day. There was one 1, an increase over the 2 given the first grading period in French II.

These facts confirmed the fact that her poor performance in Typing II was at least partially caused by her behavior.

The counselor further revealed that although the subject's high school academic record was good, (with the exception of the poor grades received in Typing II), she had been cited numerous times during her sophomore year for varying degrees of misconduct. These citations included constant disruptive conduct in various classes, minor theft and petty vandalism. For these acts she had been suspended from school on three different occasions, and a hearing to discuss possible expulsion for the school year had been held. During her junior year, the disruptive conduct seemed to be confined to the Typing II class, where, in the subject's own words,

she "liked to bug" the teacher.

The subject's autobiography, on file in her folder, revealed the following:

> "I have a lot of likes. One of them is going to school and learning something I have never known. My dislikes is when I catch a whipping when I do something wrong, but you are supposed to catch a whipping when you have done something wrong. My favorite amusements is music, reading books, going on trips, when Christmas comes, and when my birthday comes....."

After considering the information learned about the subject, the experimenter felt that here indeed was a subject worthy of behavior modification by using the discoveries and the principles of behavior resulting from the work of Ivan Pavlov, B. F. Skinner and others. The subject was intelligent; she had established goals for her future (she wanted to become a teacher of English in a junior high school); she had revealed what was reinforcing for her (music, books, ets.). If the research could be carried out successfully, the subject would exhibit - and hopefully internalize - more socially acceptable behavior, her grade in Typing II should improve, and her teacher and her classmates would be relieved of disruptive influences in their classroom.

While finding studies recorded by others dealing with the same problem that the subject exhibited on the high school level fruitless, studies done on the elementary and junior high school level seemed encouraging.

Hall, Fox, Willard, Goldsmith, Emerson, Owen, Davis and Porcia's study (1971) proved that through a combined use of extinction, praise and token reinforcement, high degrees of change were effected in pupils ranging from mentally retarded to normal students, from white middle class areas and all black economically depressed areas. The grade levels ranged from first grade to junior high school.

A study by Wills and Hall (1971) showed that a counselor was able to

help a teacher directly modify disruptive behavior after parent conferences, etc., had failed. The teacher had been asked to ignore disruptions, but to give the child a high rate of attention and praise for appropriate behavior. Disruptions decreased from 9.5 to 1.5 per day.

Hughes and Gregerson (1971) demonstrated that irrelevant talk-outs could be decreased by making a reward, (the use of the Magic Slate), contingent on not talking out. Talk-outs decreased from a mean baseline rate of 13, to less than 3 per session.

After a conference with the subject's Typing II teacher, the librarian and the teacher decided to begin experimental procedures in a cooperative attempt to modify the subject's disruptive behavior in the Typing II class.

SUBJECT AND SETTING

The subject in the study was a sixteen year-old, normal, eleventh grade girl, enrolled in an all black secondary school (10th, 11th, and 12th grades) of approximately 800 students, located in the northeast economically depressed area of Kansas City, Kansas.

The experiment was conducted in the subject's Hour I Typing II class, where the subject was one of thirty-eight normal students in a combined class of sophomores, juniors and seniors.

The school library was used for the conferences held between the subject and the school librarian as the study progressed.

MEASUREMENT PROCEDURES

Although the subject's disruptive behavior took many forms, the decision was made to measure talking-out only. Talking-out was defined as any oral utterance given by the subject without the teacher's expressed

permission during Hour I, a 55-minute period beginning at 7:30 A.M. A pencil check of the number of talk-outs during the class period was kept by the teacher daily; this resulting figure was reported to the librarian who recorded the information on a graph. The teacher was instructed not to make any comment when talk-outs or other disruptions occured. The school librarian acted as observer on two occasions during Baseline$_1$. A classmate of the subject, selected by the teacher for her objectivity, maturity, and general record of accuracy acted as observer during experimental condition$_1$, reversal, and experimental conditions$_2$. The percent of agreement during baseline$_1$ was 90%; for experimental conditions$_2$ and reversal 100% each, respectively. The mean reliability check for the three named periods was 97%. The percent of agreement for Experimental conditions$_1$ would not be computed mathematically. Agreement in the records for the first of the three named periods was computed by dividing the smaller number by the larger and multiplying by 100.

EXPERIMENTAL PERIOD

Baseline$_1$

Because the subject's talking-out behavior was of long standing duration (See Introduction), and because this behavior had adversely affected her grades for two nine-week periods, the decision was made to confine the baseline period to seven class periods. The school librarian acted as observer. The mean number of talk-outs per hour was 6. The mean percent of agreement was 90.%

EXPERIMENTAL CONDITIONS

The subject was invited to the library for a conference with the school

librarian. The librarian explained to the subject that she was enrolled in a class in Behavior Modification, and that she had been asked to conduct an experiment as partial fulfillment for completion of the the course. She was told that it had come to her attention that the subject had been having problems in Typing II for talking-out- that this behavior had perhaps affected the quality of work that she had produced and had lowered her grade.

In terms that the subject could understand, the principles of behavior modification were explained, with emphasis on the idea that reward is more effective than punishment, that if she agreed to help by being the subject in this experiment, and if improvement occured in her talking-out behavior, that she would be rewarded; that her rewards would be first choice at selecting books from incoming new library books, and that she would be the librarian's guest at the opera, Tosca, which would be performed at the University of Missouri at Kansas City, Playhouse in April.

The subject agreed to participate, with the clear understanding that she was to ask her teacher's permission to speak for any oral utterance whatsoever, and that any oral utterance without her teacher's permission would be considered a talk-out; that her goal was to have no talk-outs during her Typing II class. She was also aware that any talkouts would be recorded by her teacher and reported to the librarian.

The teacher had been told to ignore the subject's talk-outs (except for recording them), but she was to smile and compliment her at the end of the hour when any improvement in the number of talk-outs after $Baseline_1$ occured. The subject was not told this part of the experiment.

$Experimental\ condidions_1$ was in effect for nine days. During this period, the subject was allowed to select new library books, and accompained

the librarian and her family to a performance of the opera, Tosca, which was performed at the University of Missouri at Kansas City Playhouse. The mean number of talk-outs during this period was 1.2. On the two occasions checked, the teacher recorded one talk-out, the observer recorded none (the 11th day); on the 15th day, the observer recorded 4 talk-outs, the teacher 3. Mathematically, the percent of agreement could not be figured, although the eyeball test showed definite lessening of talk-out performance.

Baseline$_2$

In order to determine whether or not a causal relationship existed between the reduced number of talk-outs and the rewards being offered for the subject's improved behavior, reversal procedures were begun.

At a second conference, the subject was told by the librarian that due to unexpected duties which would take her away from school for several days, the experiment would have to be discontinued for an indefinite period. The subject remarked to her teacher that she now felt like "being out of jail". The teacher, unknown to the subject, continued to record talkouts for the five days agreed upon for reversal, and continued to refrain from commenting when talk-outs or other disruptions occured. The number of talk-outs increased to a mean of 3.8. The classmate performed as reliability observer on two occasions. The mean percent of agreement was 100%.

EXPERIMENTAL CONDITIONS (2)

On the twenty-third day of the experiment, the librarian held another conference with the subject. The subject was told that the experiment was to begin again. She was commended for the improvement she had made over the behavior which had existed prior to the first conference with

the librarian. Her grade card for the third nine-week period had shown a rise from the 5 of the second nine-week period to a 3. For this the subject received additional praise. She was further instructed that her reward for continuing the experiment was to again have first choice at checking out new books from the library along with an additional reward which was to be a surprise. The surprise reward was a birthday card containing money to attend a concert. The mean number of talk-outs during this seven day period was 1. A classmate acted as reliability observer on one occasion. The percent of agreement was 100%.

DISCUSSION

As a result of the experiment, the subject's behavior in the Typing II class was remarkably changed for the better. The teacher and the subject's classmates were relieved of annoying disruptions. By concentrating on her daily assignments, the subject's overall grades in Typing II improved noticeably. While there is little doubt that the rewards offered and earned served as incentives to more socially acceptable behavior, a great deal of credit must be given to the intangible rewards the subject received: praise from her classmates, and attention by other teachers who had noticed the change in the subject's behavior and had told the subject so.

When the typing teacher verbally ignored the subject's disruptions during the reversal period and experimental conditions one and two, good use was being made of the behavioral principle of extinction, and by commending the subject's good behavior, the disruptive behavior was being weakened.

In the five days after the formal experiment had ended, a post check showed the subject's talk-outs were being kept at a low level.

Future researchers may find this type of approach to changing the behavior of secondary school subjects challenging. They should be sure to discover before beginning experimental conditions what is reinforcing enough to the student to effect a change.

TITLE: The Effectiveness of Token Reinforcement In A Foreign Language Classroom

ABSTRACT

The students in a French class had been finishing homework at school, in other classes and in their seats after the bell for class had sounded.

A token reinforcement system was initiated to improve the number of completed assignments turned in before the tardy bell for class and the number of correct scores on assignments in homework and classwork.

The students were given one month to earn 45 tokens with which they earned a lunch in a French restaurant. This also gave them two free hours away from school because the normal lunch schedule allowed only 25 minutes for each lunch period.

A criterion set up by the students, themselves included the following:

1. Homework turned in before the tardy bell.
2. A 1 or 2 grade made on each assignmnet.
3. Participation in French games and winning.
4. Speaking in French in the classroom.

Tokens were taken away for cheating of any type.

SUBJECTS AND SETTING

Above average second year French junior and senior students in an all black high school located in a low income area.

MEASUREMENT PROCEDURE

Baseline was taken for 5 days with a class mean of 73.2% for assignments turned in and 74% for assignment class score averages.

A token reinforcement system was implemented during the first experimental phase. The students received tokens for assignments turned in on time fully completed. A grade of <u>one</u> or <u>two</u> (equivalent to an A or B) was given for classroom participation. These tokens were to be exchanged for lunch in a French restaurant after they earned 45.

The students set their own criterion for the tokens and allowed themselves one month to accomplish the quota. During this period, the mean number of assignments turned in and the class mean assignment scores increased to 96% and 85% respectively.

$Baseline_2$ was then implemented and included a withdrawal of all tokens. The means for assignments and assignment scores were 96% and 89% respectively.

The $experimental_2$ phase followed with only 2 days of data because the school year was ending. The means for these two still remained significantly high. Tokens were exchanged for books and records since time would not permit another lunch in a restaurant.

RESULTS

The token system was very effective. The students continued to perform at a higher rate than during baseline at each of the experimental phases implemented and the assignment scores showed a noticeable increase or gain.

TITLE: Modified Teaching Procedures

ABSTRACT

This research investigated the effectiveness of modified teaching procedures on test and/or quiz scores for high achievers in two Humanities classes. The procedure used modified teaching procedures and class suggested reinforcers. The class suggested reinforcers were compiled from suggestions made by the students concerning activities that interested them most. The results of this research indicated that the modified teaching procedures and the reinforcers made available to class participants were effective in increasing the mean class scores on tests and/or quizzes.

SUBJECTS AND SETTING

High achieving students in two twelfth grade Humanities classes served as subjects. These students attended classes in an all black high school located in a low income area of Kansas City, Kansas.

MEASUREMENT PROCEDURE

A minimum of three quizzes were given each week in classes that meet for 50 minutes 5 days a week. The number of correct responses were converted to class percentages. The two classes received the same material in class discussions and on tests. Class number 1 received additional reviews both oral and written from the teacher prior to each test given. When class number 1 reached a significantly high percentage, other reinforcers that were more tangible were used to see if they would, in any way affect the mean class scores on tests and hopefully cause them to increase the mean class average. The same procedure was then implemented for class number 2.

Reliability was checked intermittently by another student not enrolled in either of the two classes. He was provided an answer key with specific instructions.

Baseline

I. The teacher will:

A. Discuss the same material with each class.

B. Give tests 3 times a week where possible.

C. Give each class the same material on tests with questions worded in a different manner.

1. Each test will have a combination of essay, completion and true-false questions.

2. Certain specifics are noted for the essay questions.

3. All other questions will have definite answers.

D. The tests times will be announced with the exception of very short quizzes given for the purpose of determining the comprehension of material covered in a given class period.

II. Changes in teaching procedures and consequences requires that the teacher:

A. Discuss the same materials in the same manner with both classes.

B. Review the test questions with a question and answer type procedure prior to administering the tests.

1. Review at the end of the class period

2. Review again just before giving the test.

(a) Class number 2 will have no special review of the test.

(b) Class number 2 will only know when test will be given.

RESULTS

The results of this research indicated that when modified teaching procedures alone were applied to class No. 1, mean test scores did increase, but when the modified teaching procedure was supported by class seleted reinforcers, mean test scores increased to the 90 percentile. When these same procedures were subsequently applied to class No. 2 in this multiple baseline strategy, like increases were recorded and maintained in both classes.

Thus,there is indication that talented students from a deprived environment can achieve, if subject matter is structured and adequate reinforcers are programmed.

During the course of the funding of this grant, several studies were carried out by secondary teachers which involved the parent and the teacher working together to modify or change some social or academic behavior of a secondary student. A typical research strategy follows.

TITLE: A Behavior Modification Project Using a Token Reinforcement System

Part I.

The purpose of this project was to investigate the effectiveness of counseling procedures using a token system in a behavior modification plan with the teacher and parent involved in a conference together in order to increase the attending behavior and grades of the subject.

Part II.

The subject was a low acheiver in a regular tenth-grade classroom. His mother and father are separated and he lives with the mother. He is the second child in a family of six.

Between the third and fourth grades, the subject began to drop academically several months below his normal grade level according to the tests he was given in elementary school. Each year since elementary school, the subject has fallen behind his class normal expectancy almost an entire grade level. There is no known mental or physical reason for the sudden drop in the grade level of performance for the subject. The information available in the counselor's office supports this fact.

Part III.

A teacher referral is found on the following page which indicates that the subject is a problem both in academic and in classroom discipline. This information was written by the remedial reading teacher who felt that the student conducted himself in this unorderly fashion to compensate for his inability to keep up in the class. It also states that the student resents being in a classroom which he considers abnormal.

To All Who Are Concerned: Case History

Because of his disruptive behavior and obvious disinterest in imporving his reading skills, I am recommending that Pierre Manier be removed from my 6th hour developmental reading class.

Every since the first day he was enrolled in the class Pierre has said in words and has shown in his behavior that he does not want to be in what he insists on calling "the retarder room". I have explained to him and the other students that developmental reading is a class for students with average and slightly above average readers.

Pierre has repeatedly come in my room running, playing tag with a couple of the other boys in the class, etc. and I have repeatedly warned him that his behavior is disruptive and that he will not be able to remain in the class if he continued to act in this manner.

I requested that his counselor, Mr. Mason, transfer Pierre to another class and Mr. Mason said, at first, that he would take care of it; however, the counselor later told me that it was impossible to transfer Pierre because of class schedule complications. Pierre, also asked if he could see the counselor about transferring, and I have permitted him to go to the office during 6th hour to speak to Mr. Mason.

As aforementioned I have talked to Pierre about his getting down to business and cutting out his foolishness, and I detained him after school a few times to try to persuade him to conduct himself like a young man. He found it amusing to taunt and pester one of the students in my class, Edwin Berry, who is an extremely slow reader. In these after school sessions I have explained to Pierre that (1) Edwin is in the class because of his special reading problems, that (2) he (Pierre) and the others are mostly average readers, that (3) it was wrong and also childish for the

rest of them to badger Edwin and embarrass him, and hurt him by calling him "the dummy", "that retarded boy" etc. and other names that Peirre (as well as a couple of the other boys) have used. My efforts to get Pierre to leave Edwin alone have been futile.

Last week, on February 20th, I believe, at the beginning of the class period, Pierre was pestering Edwin and I spoke to him two or three times and asked him to please sit himself down at his own booth and do his class-work. Pierre insisted that he wasn't doing anything and yet when I saw him he had gotten out of his seat and was over at Edwin's booth and was hovering all over Edwin's chair. I again warned Pierre (and another student) that they weren't going to stay in my class that day if they continued to play and act up. (The other student was not doing his work and was talking excessively and playing). Finally, when I went to the bookcase by Edwin's chair to get some equipment for another student, several of the students shouted to Pierre to stop choking and hitting Edwin. I turned around then and saw Pierre standing over Edwin and insisting once again, "I wasn't doing nothing!". My patience had run out, so I took Pierre to Miss Phillips office, explained the incident to her and told her that I did not want him back in my class because he insists on badgering Edwin and behaving in a manner that is not conductive to learning. Miss Phillips said that if Mr. Mason could not rearrange Pierre's classes, and if Pierre would not behave himself, that he would have to be sent home. I left the matter in Miss Phillips' hands and returned to my room.

I had tried to call Pierre's parents this semester after I saw that my talking to him was doing no good, but the telephone had been disconnected.

Pierre feels that he is somehow being persecuted, but I have no personal cause against him. My complaint against Pierre Manier is that

he is very immature and behaves in a way that makes it almost impossible for me to teach my reading class in an orderly and efficient way. Also, I do not see that I should tolerate his persecuting another very sensitive student.

PartIV.

After explaining the information just given to the mother of the subject, the following questions were asked in a conference:

1. Is there any thing important or significant in the background of the child or from birth that would be worth mentioning?
2. When did you notice any changes in his attitudes concerning his work and his grades?
3. Who is responsible for the discipline in the home?
4. Is there ever any disagreement about the means of discipline used?
5. What do you consider to be your child's strong points?
6. What are his weak points?
7. How do you feel about his progress in school?
8. If you had a choice, what would you like to change about your child?

The feelings of the mother were expressed on each of these points. Nothing specific can be noted as the cause for the sudden drop in his academic performance or in his behavior.

She felt that because of her working hours and the fact that she must be both father and mother to the subject the blame for his failure is partially hers. The subject is a discipline problem in addition to having poor academic achievement and he seems to resent being in a "retarded classroom."

At this point, the mother looked at several studies completed about children with similar discipline and academic problems as her son. These studies also were examples of the parent and teacher using behavior modification

methods to get a desired behavior up to a desired level.

The next procedure was to ask the mother if she would be willing to accept the responsibility of using a similar program involving token reinforcement for her son. The purpose as explained to the mother was to see if any changes could be noted in the behavior and academic work of the subject. The same information was given to the remedial reading teacher and both the mother and teacher agreed to help the subject emit what is considered proper behavior in the classroom and to increase classroom and/or homework.

Conference periods were held separately with the parent and teacher at first, and then together to explain the program in detail. The subject only received necessary information such as the behavior he is expected to emit and the rewards or consequence he will receive if he achieves these goals.

Part V.

The following is a workable plan for the parent and teacher to follow using token reinforcement to increase classroom attending behavior, homework completed at home and hopefully better classroom grades.

Program; The use of tokens to modify,conduct and increase classroom grades. The end result is to raise the student to his grade level in performance.

Procedure: The parent and reading teacher counted for one week the number of instances the behavior was emitted. This information was to be reported in a second conference to be held at the end of the first week of recording the behavior.

Both the parent and the teacher received a chart with the days listed and the number of events to be recorded in a certain area on the chart.

The teacher recorded the number of talk-outs in the classroom and

the number of completed assignments.

The parent recorded the number of times the subject studied each night in each of his subject areas.

After this information had been taken, the subject received information about the tokens that he would receive for emitting those behaviors with a limited time to earn a minimum of thirty in order to receive five dollars. For every group of five tokens over the prescribed amount earned, the subject received one dollar.

After a period of two weeks the experimenters stopped using their procedures noting and still recording the behavior or behaviors emitted by the subject. When the behavior reached the same level as before, the experimental procedure was implemented again. When the subject continued to study and perform on a desired level, the tokens were discontinued in this area and hopefully continued in other areas by the parent and teacher.

The token system alone did not bring the student to his academic level immediately, however, it is possible that the tokens did reinforce the subject enough to raise his study habits and get him to continue to study. If the study and grade problem can be changed, it will almost eliminate the behavior problem in the classroom because the subject will have something concrete to do rather than be disruptive.

The recommendations from this experiment may show a need for summer school and possibly tutoring to help the subject in his grade level.

This procedure did give the subject and incentive to become more conscientious in all subject areas. If the token system had not proved to be reinforcing enough to accomplish this, a larger amount of money and/or other reinforcers would have been implemented until some positive results could have been noted.

An eveluation of the grades of the subject was also made in each of his classes to determine the effect this program had on his other course grades.

BUDGET BALANCES

		Salary
A.	Personnel	
	Co-Director	$0.00
	Observer	0.00
B.	Equipment	0.00
C.	Supplies	0.00
D.	Travel	0.00
	Total	0.00

NOTE:

Actual report of expenditures to be prepared and submitted by Research Accounting of the University of Kansas at a later date.

Dissemination Activities

(1) Stillwell, Connie, Harris, Jasper W.; and Hall, R. Vance. Effects of provisions for individual differences and teacher attention upon study behavior and assignments completed. Child Study Journal, 1972, 2, 75-81.

(2) Harris, Joann; Harris, Jasper W.; and Hall, R. Vance. The Effect of a token system on out-of seat behavior. Research in Education, ERIC Publication, 1972.

(3) Harris, Jasper W.; Hall, R. Vance. Effects of Systematic reinforcement procedures on performance of underachieving high school pupils. Published in a booklet in a new research series copyrighted by Educational Technology Research, number 51 in a series, New Jersey, 1973.

(4) Hall, R. Vance; and Harris, Jasper W. Responsive Teaching: A Humane Approach to Behaviorism. Published in the proceedings of the Conference on the Role of Psychology in Schools. A publication of the Leadership Training Institute/Special Education, Sponsored by the Bureau for Educational Personnel Development, U. S. Office of Education, in press

(5) Harris, Jasper W. and Hall, R. Vance. Black Youth and the White Job market. School and Community. Vol LIX, No. 7, March 1973.

(6) Hall, R. Vance and Harris, Jasper W. Why lift that barge and tote that bale? School and Community, in press

(7) Murrel, Gary K. (Member of Kansas City Star Staff) Student Response Keyed to Positive Approach, Kansas City Star, February 15, 1973 (West Zone)

(8) Fox, Richard G., Copeland, Rodney E., Harris, Jasper W., Reith, Herbert, Hall, R. Vance. A Computerized System For Selecting Responsive Teaching Studies Catalogued along Twenty-eight Important Dimensions. Behavior Analysis in Education, 1973 (in press)

Capitol equipment acquisitions

The tape recorders listed allowed for the automatic recording of various behaviors for reliability purposes. These recorders were also useful in recording verbal behavior for careful analysis which would otherwise be difficult to accomplish.

Other Activities

A three hour graduate course of study entitled, Managing Classroom Behavior, was offered at Sumner Highschool during the Spring semester in which fifteen teachers were trained in applied behavioral analysis strategies. This course was designed to acquaint teachers, principals, speech therapists, counselors and school psychologists with techniques for modifying behaviors. Participants learned to observe, record, and chart social and academic behaviors. Basic learning theory principles and applied behavior analysis verification procedures were also presented. Participants were given the opportunity to apply the procedures and principles learned by carrying out a study during the course.

This course proved quite helpful to teachers and parents as they developed strategies for coping with inappropriate social and academic behaviors of secondary students.

Conclusion

From the results and conclusions of each research study carried out, (See methods, procedures and results) one can conclude that the procedures and technology used were very instrumental in changing and/or modifying inappropriate social and academic behaviors. These studies clearly demonstrate that inappropriate learning behaviors of low achieving students can be controlled and eliminated and that appropriate learning behaviors can be strengthened by the application of behavior modification techniques. These studies have resulted in precise measurement procedures which allow a controlled analysis of the environmental factors which bring about these changes.

Therefore, a program such as this which provides reinforcement for academic achievement is of critical importance if those talented youths are to be salvaged. Specific procedures which result in increased academic performance and which can be carried out in cooperation with existing school structures and administrative arrangements are needed if they are to be applicable in a wide scale. The research contained herein is an attempt to implement such a program.

Recommendations

The success of this project will be the foundation for still other programs of this nature. We have only begun to investigate academic achievment on the secondary level utilizing reinforcement theory and design. Now, as a result of this research, we can go a step further and add other reinforcers that are available within a secondary setting.

Teaching a three hour graduate research course at Sumner Highschool, and rearranging academic programs for a select student population was just

the beginning of what we plan to do in a secondary setting. But the real impact of our research on student learning is that we will be able to go to school district administrators and state that we have some procedures which affect the learning rate of their students. There is no school district in a disadvantaged area or any area that would not welcome a new approach to the learning disabilities of their students.

Too, many teachers traditionally have not found significant success with the use of the weak reinforcers available to them in secondary settings. When one is dealing with young adults whose experiences in life for exceed the sheltered backgrounds of many of the teachers, it becomes imperative that we design and implement strong programs like the research here that can be backed-up and supported by those reinforcers available in this setting.

For years educators have emphasized that we must "start where the students are." Consistent failure and disenchantment is " where" these students are. It is the established consensus among teachers that all teaching must be related to goals and/or objectives. Yet, it is precisely in this area that all education is vulnerable because too often daily goals are woefully inadequate, nonexistent, and sometimes meaningless.

Hopefully, one of the benefits which seems certain to accrue from our efforts will be more articulate statements of objectives. Another benefit will be more systematic selection of subject matter to achieve the daily educational objectives for individuals who bring to the learning situation different backgrounds of experience.

Educators often write about disadvantaged youth and their education as if there is something strange, mysterious and baffling about them. It will be helpful to remember that the disadvantaged are human beings, responding

as any other human being would respond, had they been exposed to the environment and forces the disadvantaged have.

BIBLIOGRAPHY

Broden, M., Bruce, C., Mitchell, M.A., Carter, V., and Hall R.V. Effects of teacher attention on attending behavior of two boys at adjacent desks. Journal of Applied Behavior Analysis, 1970, 3, 205-211.

Hall, R.V., "Training Teachers in Classroom Use of Contingency Management." Educational Technology. April, 1971, 33-38.

Hall, R. Vance, Fox, R., Willard, D., Goldsmith, L., Emerson, M., Owen, M., David, F., and Porchia, E. The teacher as observer and experimenter in the modification of disputing and talking out behaviors. Journal of Applied Behavior Analysis. 1971, 4, 141-149.

Hall, R.V., Lund, D., and Jackson, D. Effects of teacher attention on study behavior. Journal of Applied Behavior Analysis, 1968, 1, 1-12.

Hall, R.V., Panyan, M., Rabon, K., and Broden, M. Instructing beginning teachers in reinforcement procedures which improve classroom control. Journal of Applied Behavior Analysis, 1968, 1, 315-322.

Harris, J.W., and Hall, R.V. Effects of systematic reinforcement procedures on performance of underachieveing high school pupils. Published in a booklet in a new research series copyrighted by Educational Technology Publications, Inc., 1972, Number 51 in a series, New Jersey 1973

Hughes, F. and Gregerson, G. Reduction of irrelevant talking-out in a first grader through the use of magic (slate). In Part III. Managing Behavior: Applications in School and Home. Lawrence, Kansas, H & H Enterprises, 1971. p. 47.

Mawhinney, V., Bostow, D., Laws, R., Blumenfild, G., and Hopkins, B. A comparison of students studying behavior produced by daily, weekly, and three testing schedules. Journal of Applied Behavior Analysis, 1971, 4, 257-264.

Wills, G., and Hall, R.V. A school counselor assists a teacher in reducing disruptions by a second grade girl. In Part III. Managing Behavior: Application in School and Home. Lawrence, Kansas, H & H Enterprises, 1971. p. 27.